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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,195	09/04/2003	Alexander E. Andreev	L13.12-0247 / 03-1634	8414
7590	03/20/2007		EXAMINER	
Leo J. Peters LSI Logic Corporation MS D-106 1621 Barber Lane Milpitas, CA 95035			PATHAK, SUDHANSHU C	
			ART UNIT	PAPER NUMBER
			2611	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/20/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/656,195	Applicant(s) ANDREEV ET AL.	
	Examiner Sudhanshu C. Pathak	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Sept. 4th, 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 5-20 is/are rejected.
- 7) ☒ Claim(s) 3 and 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Sept. 4th, 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-20 are pending in the application.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 9-20 are rejected under 35 U.S.C. 101.

In regards to Claims 1-29, the claims disclose a process (method) that manipulates only number, abstract concepts or ideas or representing any of the foregoing, the claims are not being applied to an appropriate subject matter.

In regards to Claim 9 (independent Claim), Claim 9 merely discloses a computer program (functional descriptive steps), producing no practical application, and do not define any structural and functional interrelationship between the computer programs and other claimed elements of a computer which permit the computer program functionality to be realized, thereby producing no tangible, concrete and useful results. (See Pages 52-54 of the Interim Guidelines).

In regards to Claim 15 (independent Claim), the claims call for a seemingly patentable process but in reality seeking patent protection on an abstract idea in the form of a computer program as evidenced by Claim 9.

In regards to Claims 10-14 & 16-20 are inherently rejected as being dependent on above rejected independent claims.

Specification

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The title of the application (invention) appears on the Abstract sheet, this is inappropriate and appropriate corrections are recommended.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-2, 5-8 (apparatus) & 15-20 (method) & 9-14 (computer-readable medium) are rejected under 35 U.S.C. 102(e) as being anticipated by Rojas et al. (2004/0015666 A1).

In regards to Claims 1, 7-9, 13-15, 17-19, Rojas discloses a circuit (method) (Fig. 2) having: an input for receiving an input signal containing a plurality of bits at an input frequency and for receiving a representation of desired output frequency (Fig.

2, element 200, 218 & Paragraph 4) {Interpretation: The reference discloses receiving serial data stream wherein the input frequency is interpreted as the frequency of the transmitter clock which sends the bit stream. The desired output frequency is interpreted as the receiver clock frequency}; a splitter for splitting the input signal into a plurality of split signals each at a frequency of the desired output frequency (Fig. 2, elements 202, 206) {Interpretation: The reference discloses a deserializer which is interpreted as a splitter which splits the incoming serial data into a plural parallel data at the desired frequency wherein the splitting of the serial-to-parallel inherently changes the frequency of the output parallel data wherein the output frequency is the desired frequency}; a plurality of catchers for identifying valid bits of a respective split signal (Fig. 2, elements 210, 212 & Fig. 3, element 308 & Paragraphs 42-44, 47 & Paragraph 67 & Paragraph 70, lines 14-20 & Tables I-V); a shifter for shifting valid bits identified by at least some of the catchers by a predetermined number; and an output responsive to the shifted valid bits to provide an output signal containing a plurality of valid bits of the input signal at the desired output frequency (Paragraphs 37-38, 40, 42-44, 47 & Fig. 3, elements 324, 326 & Paragraph 71-72 & Fig. 2, element 216) {Interpretation: The reference discloses a synchronization unit which is interpreted as a shifter so as to synchronize the clock output from the deserializer (206) with the receiver clock (218) and outputs a plurality of valid bits}. Rojas further discloses implementing the receiver in a computer platform with multiple processors (Paragraph 28, lines 9-12 & Paragraph 29, lines 1-2 & Paragraph 31, lines 2-4) {Interpretation: The reference discloses

implementing the method in a digital components which are controlled by software code}. Furthermore, there is no criticality in the number of split signals and the number of catchers are based on an empirically-derived split factor this is a matter of design choice depending on the input frequency and the desired output frequency and component complexity desired.

In regards to Claims 2, 10-12 & 16, Rojas discloses a circuit as described above. Rojas further discloses the output is further responsive to the shifted valid bits to derive the predetermined number (Paragraphs 37-38, 40-44, 50-53 & 71-72).

In regards to Claim 5, Rojas discloses a circuit as described above. Rojas further discloses operating as a phase shifter, wherein the predetermined number is 1 (Paragraph 42, lines 11-21).

In regards to Claims 6 & 20, Rojas discloses a circuit as described above. Rojas further discloses operating as a frequency reducer, wherein the predetermined number is greater than 1 and identifies a width of the output signal (Fig. 2, elements 202) {Interpretation: The reference discloses a deserializer which is interpreted as a splitter which splits the incoming serial data into a plural parallel data at the desired frequency wherein the splitting of the serial-to-parallel inherently changes (reduces) the frequency of the output parallel data wherein the output frequency is the desired frequency}.

Allowable Subject Matter

7. Claims 3-4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

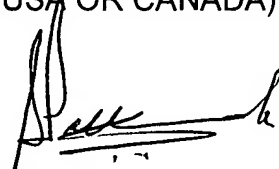
Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure, it is recommended to the applicant to amend all the claims so as to be patentable over the cited prior art of record. A detailed list of pertinent references is included with this Office Action (See Attached "Notice of References Cited" (PTO-892)).
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sudhanshu C. Pathak whose telephone number is (571)-272-3038. The examiner can normally be reached on M-F: 9am-6pm.
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh M. Fan can be reached on (571)-272-3042.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2611

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Sudhanshu C. Pathak
Examiner
Art Unit 2611